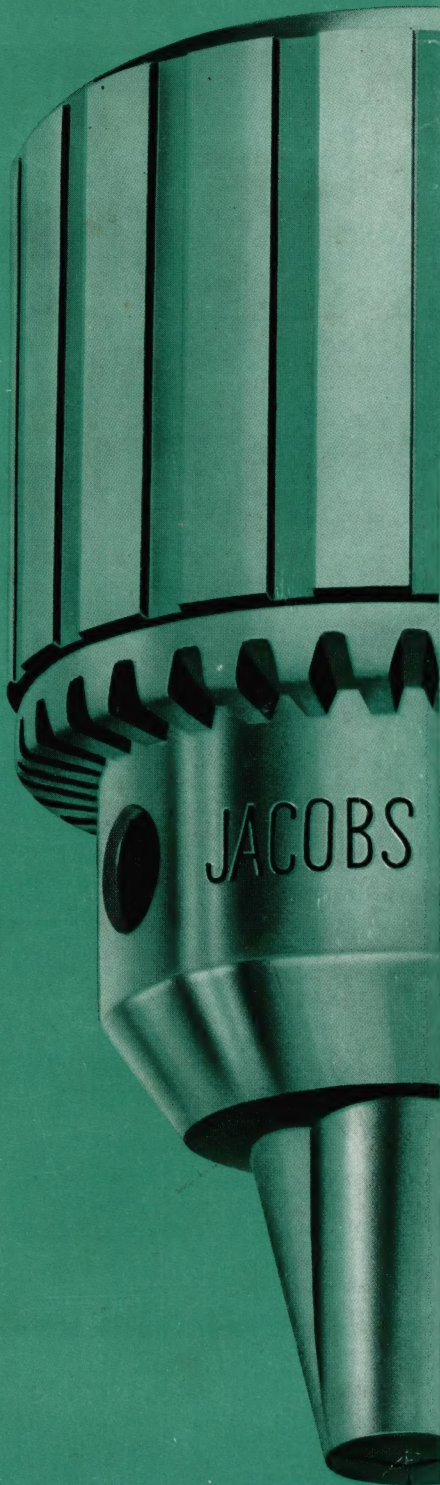


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at request* 2-5-63



# JACOBS

## Industrial Drill and Tap Chucks

### INDEX

#### Page

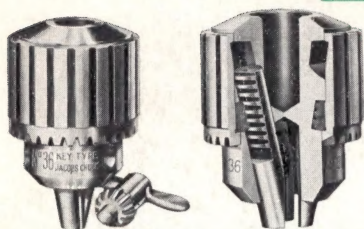
- 2....Plain Bearing Key Type Chuck
- 3....Parts for Plain Bearing Chuck
- 4....Ball Bearing Super Chuck and parts
- 5....Headstock and Center Rest Chuck, Com-  
mutator Kit
- 6....Hi-Torque Keyless Chuck
- 7....Hi-Torque Keyless Chuck Parts
- 8....Rubber-Flex Tap Chuck
- 9....Parts for Rubber-Flex Tap Chuck
- 10....Impact Keyless Chuck
- 11....Additional Products for Industry
- 12....Arbors and Adapters
- 13....Arbor Interchangeability, Taper Dimen-  
sions, Fitting Information
- 14....Service and Repair
- 15....Service and Repair

**IF IT'S A JACOBS — IT HOLDS**

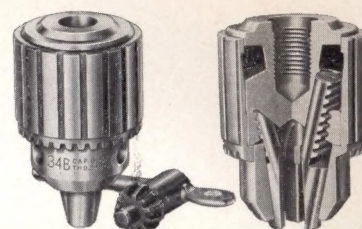
**CATALOG NO. 100**



## plain bearing key type chucks



Jacobs Plain Bearing Key Type Chucks are standard equipment on the finest power tools throughout the world. Maximum gripping power, accuracy and durability are assured when used on electric and pneumatic drills and drill presses. This fine chuck is provided with either threaded or tapered hole mounts in a complete range of sizes. It is the world's most popular drill chuck.



## Taper Mounted Chucks

## LIGHT DUTY MODELS

## Thread Mounted Chucks

CHUCK MODEL	CAP.	TAPERED MOUNT	USES KEY	WEIGHT Lbs. Ozs.	LENGTH		DIAM.
					Closed	Open	
0	0- $\frac{5}{32}$ "	0 JT	K0	0-2	1 $\frac{3}{8}$	1 $\frac{1}{8}$	$\frac{7}{8}$
1A	0- $\frac{1}{4}$	1 JT	K1	0-5	1 $\frac{5}{16}$	1 $\frac{1}{32}$	1 $\frac{3}{16}$
2A	0- $\frac{3}{8}$	2 JT	K2	0-13	2 $\frac{3}{16}$	2 $\frac{7}{16}$	1 $\frac{1}{16}$
6AE	0- $\frac{1}{2}$	E JT	K3	1-5	3 $\frac{1}{2}$	2 $\frac{3}{32}$	1 $\frac{5}{16}$
6A-2A	0- $\frac{1}{2}$	2 JT	K3	1-5	3 $\frac{1}{16}$	2 $\frac{5}{8}$	1 $\frac{5}{16}$
6A-33	0- $\frac{1}{2}$	33 JT	K3	1-5	3 $\frac{1}{16}$	2 $\frac{5}{8}$	1 $\frac{5}{16}$
633C*	0- $\frac{1}{2}$	33 JT	K3C	1-7	3 $\frac{2}{32}$	2 $\frac{7}{32}$	1 $\frac{5}{16}$
633D**	0- $\frac{1}{2}$	33 JT	K3C	1-8	3 $\frac{2}{32}$	2 $\frac{7}{32}$	1 $\frac{5}{16}$
33	$\frac{5}{64}$ - $\frac{1}{2}$	33 JT	K32	1-1	3 $\frac{5}{32}$	2 $\frac{1}{32}$	1 $\frac{1}{32}$
3333C*	$\frac{5}{64}$ - $\frac{1}{2}$	33 JT	K32C	1-2	3 $\frac{7}{32}$	2 $\frac{9}{16}$	1 $\frac{1}{32}$
3326	$\frac{5}{64}$ - $\frac{1}{2}$	$\frac{5}{8}$ " Str. hole	K32	1-3	3 $\frac{3}{64}$	2 $\frac{7}{8}$	1 $\frac{1}{32}$

CHUCK MODEL	CAP.	THREADED MOUNT	USES KEY	WEIGHT Lbs. Ozs.	LENGTH		DIAM.
					Closed	Open	
0B $\frac{5}{16}$ -24	0- $\frac{5}{32}$ "	$\frac{5}{16}$ -24	K0	0-2	1 $\frac{1}{2}$	1 $\frac{3}{16}$	$\frac{7}{8}$
1B $\frac{3}{8}$ -24	0- $\frac{3}{16}$	$\frac{3}{8}$ -24	K1	0-4	1 $2\frac{9}{32}$	1 $1\frac{1}{32}$	1 $\frac{1}{16}$
1BS	0- $\frac{3}{16}$	short $\frac{3}{8}$ -24	K1	0-4	1 $1\frac{1}{16}$	1 $\frac{5}{16}$	1 $\frac{1}{8}$
1B $\frac{3}{8}$ -24	0- $\frac{1}{4}$	$\frac{3}{8}$ -24	K1	0-5	1 $1\frac{5}{16}$	1 $1\frac{1}{32}$	1 $\frac{1}{16}$
1B $\frac{5}{16}$ -24	0- $\frac{1}{4}$	$\frac{5}{16}$ -24	K1	0-5	1 $1\frac{5}{16}$	1 $1\frac{1}{32}$	1 $\frac{1}{16}$
2B $\frac{3}{8}$ -24	0- $\frac{3}{8}$	$\frac{3}{8}$ -24	K2	0-13	2 $1\frac{3}{16}$	2 $\frac{3}{16}$	1 $1\frac{1}{16}$
6B $\frac{1}{2}$ -13	0- $\frac{1}{2}$	$\frac{1}{2}$ -13	K3	1-6	3 $\frac{1}{2}$	2 $2\frac{3}{32}$	1 $1\frac{5}{16}$
6B $\frac{1}{2}$ -20	0- $\frac{1}{2}$	$\frac{1}{2}$ -20	K3	1-6	3 $\frac{1}{2}$	2 $2\frac{3}{32}$	1 $1\frac{5}{16}$
6B $\frac{1}{2}$ -24	0- $\frac{1}{2}$	$\frac{1}{2}$ -24	K3	1-6	3 $\frac{1}{2}$	2 $2\frac{3}{32}$	1 $1\frac{5}{16}$
33B $\frac{3}{8}$ -24	$\frac{5}{64}$ - $\frac{1}{2}$	$\frac{3}{8}$ -24	K32	1-0	3 $\frac{3}{32}$	2 $\frac{7}{16}$	1 $1\frac{1}{16}$
33B $\frac{1}{2}$ -20	$\frac{5}{64}$ - $\frac{1}{2}$	$\frac{1}{2}$ -20	K32	1-0	3 $\frac{3}{32}$	2 $\frac{7}{16}$	1 $1\frac{1}{16}$
33B $\frac{5}{8}$ -16	$\frac{5}{64}$ - $\frac{1}{2}$	$\frac{5}{8}$ -16	K32	1-0	3 $\frac{3}{32}$	2 $\frac{7}{16}$	1 $1\frac{1}{16}$

## Taper Mounted Chucks

## MEDIUM DUTY MODELS

## Thread Mounted Chucks

CHUCK MODEL	CAP.	TAPERED MOUNT	USES KEY	WEIGHT Lbs. Ozs.	LENGTH		DIAM.
					Closed	Open	
7	0-¼"	2 short JT	K7	0-7	2⅞	12⅝ <sub>32</sub>	1 11 <sub>32</sub>
7-1A	0-¼	1 JT	K7	0-7	2⅞	12⅞ <sub>32</sub>	1 11 <sub>32</sub>
30	0-⅝ <sub>16</sub>	2 short JT	K30	0-8	2⅝ <sub>16</sub>	12⅞ <sub>32</sub>	1⅞
30-1A	0-⅝ <sub>16</sub>	1 JT	K30	0-8	2⅞ <sub>32</sub>	12⅞ <sub>32</sub>	1⅞
32	0-¾	2 JT	K32	1-0	2⅞ <sub>32</sub>	2⅞ <sub>32</sub>	1 13 <sub>16</sub>
34	0-½	6 JT	K3	1-8	3⅞ <sub>16</sub>	2 1⅞ <sub>16</sub>	2⅞
3	0-1⅞ <sub>32</sub>	3 JT	K3	1-15	3 13 <sub>16</sub>	2⅞	2⅝ <sub>16</sub>
3A	⅛-⅝ <sub>8</sub>	3 JT	K3	1-15	3 13 <sub>16</sub>	2⅞	2⅝ <sub>16</sub>
3AE	⅛-⅝ <sub>8</sub>	E JT	K3	2-0	3 13 <sub>16</sub>	2⅞	2⅝ <sub>16</sub>
36	¾ <sub>16</sub> -¾ <sub>4</sub>	3 JT	K4	2-12	4⅞ <sub>16</sub>	3⅝ <sub>32</sub>	2⅞ <sub>16</sub>
36E	¾ <sub>16</sub> -¾ <sub>4</sub>	E JT	K4	2-13	4⅞ <sub>16</sub>	3⅝ <sub>32</sub>	2⅞ <sub>16</sub>

CHUCK MODEL	CAP.	THREADED MOUNT	USES KEY	WEIGHT Lbs. Ozs.	LENGTH		DIAM.
					Closed	Open	
7B $\frac{3}{8}$ -24	0- $\frac{1}{4}$ "	$\frac{3}{8}$ -24	K7	0-7	2 $\frac{1}{32}$	1 $2\frac{3}{32}$	1 $\frac{1}{16}$
7B $\frac{1}{2}$ -20	0- $\frac{1}{4}$	$\frac{1}{2}$ -20	K7	0-7	2 $\frac{1}{32}$	1 $\frac{3}{4}$	1 $1\frac{1}{32}$
30B $\frac{3}{8}$ -24	0- $\frac{5}{16}$	$\frac{3}{8}$ -24	K30	0-8	2 $1\frac{1}{32}$	1 $2\frac{1}{32}$	1 $\frac{1}{16}$
30B $\frac{1}{2}$ -20	0- $\frac{5}{16}$	$\frac{1}{2}$ -20	K30	0-8	2 $1\frac{1}{32}$	1 $2\frac{1}{32}$	1 $\frac{1}{16}$
32B $\frac{1}{2}$ -20	0- $\frac{3}{8}$	$\frac{1}{2}$ -20	K32	1-1	3	2 $\frac{5}{16}$	1 $1\frac{3}{16}$
32B $\frac{5}{8}$ -16	0- $\frac{3}{8}$	$\frac{5}{8}$ -16	K32	1-1	3	2 $\frac{5}{16}$	1 $1\frac{3}{16}$
32B $4\frac{5}{64}$ -16	0- $\frac{3}{8}$	$4\frac{5}{64}$ -16	K32	1-1	3	2 $\frac{5}{16}$	1 $1\frac{3}{16}$
34B $\frac{5}{8}$ -16	0- $\frac{1}{2}$	$\frac{5}{8}$ -16	K3	1-9	3 $\frac{1}{2}$	2 $\frac{3}{4}$	2 $\frac{1}{16}$
34B $4\frac{5}{64}$ -16	0- $\frac{1}{2}$	$4\frac{5}{64}$ -16	K3	1-9	3 $\frac{1}{2}$	2 $\frac{3}{4}$	2 $\frac{1}{16}$
34B $\frac{3}{4}$ -16	0- $\frac{1}{2}$	$\frac{3}{4}$ -16	K3	1-9	3 $\frac{1}{2}$	2 $\frac{3}{4}$	2 $\frac{1}{16}$
3B $\frac{5}{8}$ -11	$\frac{1}{8}$ - $\frac{5}{8}$	$\frac{5}{8}$ -11	K3	2-0	3 $2\frac{5}{32}$	2 $2\frac{1}{32}$	2 $\frac{5}{16}$
3B $\frac{5}{8}$ -16	$\frac{1}{8}$ - $\frac{5}{8}$	$\frac{5}{8}$ -16	K3	2-0	3 $1\frac{1}{16}$	2 $\frac{1}{8}$	2 $\frac{5}{16}$
3B $4\frac{5}{64}$ -16	$\frac{1}{8}$ - $\frac{5}{8}$	$4\frac{5}{64}$ -16	K3	2-0	3 $1\frac{1}{16}$	2 $\frac{1}{8}$	2 $\frac{5}{16}$
3B $\frac{3}{4}$ -16	$\frac{1}{8}$ - $\frac{5}{8}$	$\frac{3}{4}$ -16	K3	2-0	3 $1\frac{1}{16}$	2 $\frac{1}{8}$	2 $\frac{5}{16}$
36B $\frac{5}{8}$ -16	$\frac{3}{16}$ - $\frac{3}{4}$	$\frac{5}{8}$ -16	K4	2-14	4 $\frac{1}{8}$	3 $\frac{1}{32}$	2 $\frac{1}{16}$
36B $\frac{3}{4}$ -16	$\frac{3}{16}$ - $\frac{3}{4}$	$\frac{3}{4}$ -16	K4	2-14	4 $\frac{1}{8}$	3 $\frac{1}{32}$	2 $\frac{1}{16}$

With the exception of Model No. 0 Chuck, which has a minimum capacity of a No. 80 drill, all light and medium duty model chucks having a nominal capacity of zero will hold No. 70 drills.

\*Equipped with a threaded locking collar which has a  $1\frac{1}{16} \times 20$  thread.

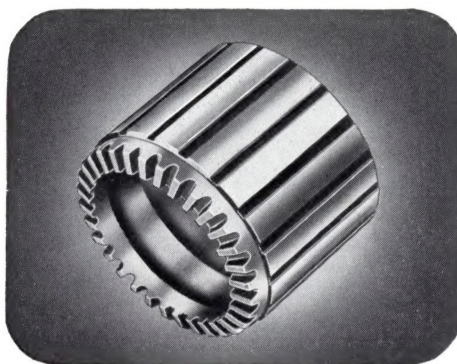
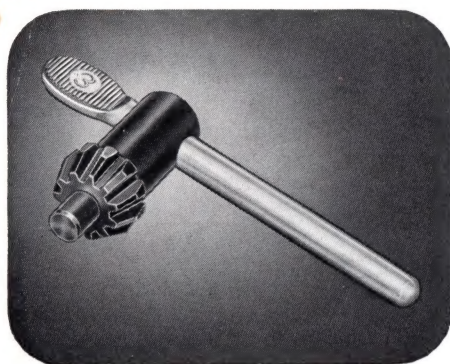
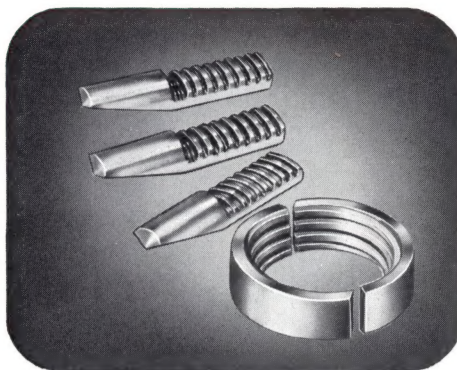
\*\*Equipped with a threaded locking collar which has a 1¼ x 12 thread.



# JACOBS

## plain bearing key type chuck

### parts



The Jacobs Plain Bearing Key Type Chuck can easily be repaired by purchasing the necessary repair parts from your distributor. The careful controls exercised in the manufacture of Jacobs Chucks assure you of part interchangeability. Complete instructions for repairing Jacobs Chucks in your own shop are shown on pages 14 and 15. Your chucks can also be returned through your distributor to the factory for reconditioning. Our reconditioned chuck policy is outlined on page 15.

#### The Jacobs

#### Rubber-Flex® Key Holder

Attach your chuck key to the cord of your portable tool with the Jacobs Rubber-Flex Key Holder. Made of high grade synthetic rubber, these holders have plenty of strength and plenty of stretch and keep the key in a convenient position for use. The key is permanently attached to the key holder and chances for lost keys are greatly reduced. These holders are usually furnished assembled on the key, although they may be ordered separately.

CHUCK MODEL	KEY	JAWS & NUT UNIT	SLEEVE
0, 0B	K0	U0	S0
1A, 1B	K1	U1	S1
2A, 2B	K2	U2	S2
3 (17/32 cap.)	K3	U3R	S3
3A, 3AE, 3B	K3	U3	S3
6A-33, 6AE, 6A-2A, 6B	K3	U6	S6
633C, 633D	K3C	U6	S6
7, 7-1A, 7B	K7	U7	S7
30, 30-1A, 30B	K30	U30	S30
32, 32B	K32	U32	S32
33, 33B, 3326	K32	U33	S32
3333C	K32C	U33	S32
34, 34B	K3	U34	S34
36, 36E, 36B	K4	U36	S36

Sleeves, Jaws and Nuts are interchangeable between tapered back and threaded back models bearing the same model number. For example, 7, 7-1A, 7B.

#### KEY HOLDER \* FITS KEYS

A	No. K0, K1, K7
B	No. K2, K30, K32
C	No. K3

\*Patent No.  
2,552,694

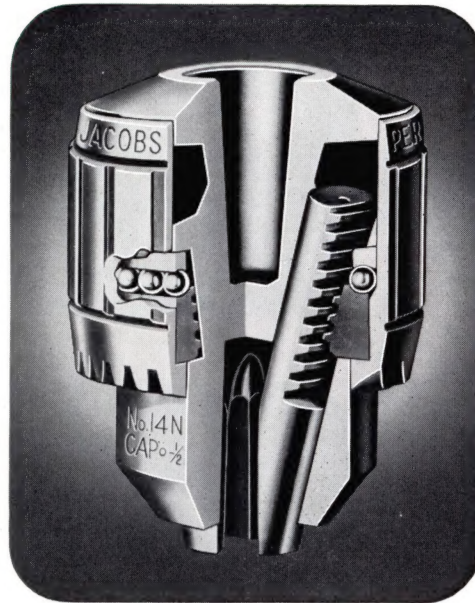




# JACOBS

## ball bearing super chucks

### key type



Jacobs Ball Bearing Super Chucks are designed especially for **HEAVY DUTY** drilling and are famous for their accuracy, gripping power and ruggedness. When mounted on taper or straight shank arbors they can be used throughout the shop on drilling machines, radials, milling machines and lathes. The ball thrust bearing reduces friction and permits great gripping power. The hardened and ground alloy steel nut and jaw assembly guarantees long life under heavy duty conditions.

Like all Jacobs Chucks, repair parts for the Ball Bearing Super Chuck are available through your distributor, or, if you prefer, the chuck may be returned to the factory for reconditioning.

CHUCK MODEL	CAPACITY	TAPERED MOUNT	USES KEY	WEIGHT lbs.-ozs.	LENGTH		DIAM.
					Closed	Open	
8½ N	0-¼"	2 short JT	K30	0-9	2 13/32	1 7/8	1 9/16
11N	0-3/8	2 JT	K32	1-2	2 7/8	2 1/4	1 5/16
14N	0-1/2	3 JT	K3	2-6	3 3/8	2 31/32	2 7/16
16N	1/8-5/8	3 JT	K4	2-15	4 1/4	3 3/4	2 5/8
18N	1/8-3/4	4 JT	K4	4-4	5 1/16	3 31/32	3
20N	3/8-1	5 JT	K5	7-0	5 3/8	4 1/4	3 2 1/32

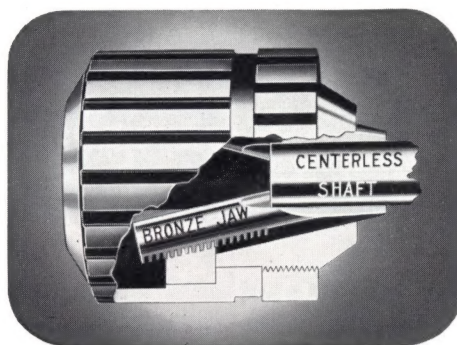
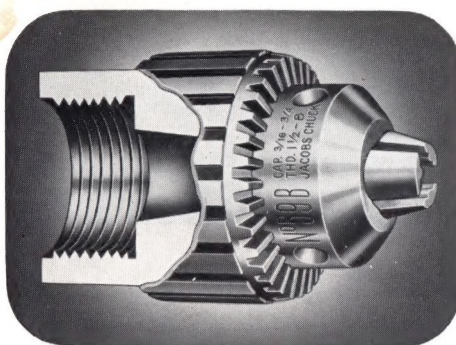
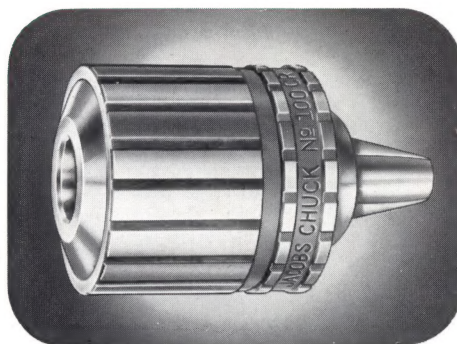
### ball bearing super chuck parts

CHUCK MODEL	KEY	JAWS & NUT UNIT	SLEEVE	THRUST RACE & BALLS
8½ N	K30	U8½ N	S8½ N	T8½
11N	K32	U11N	S11N	T11
14N	K3	U14N	S14N	T14
16N	K4	U16N	S16N	T16
18N	K4	U18N	S18N	T18
20N	K5	U20N	S20N	T20



# JACOBS

## headstock and center rest chucks



Jacobs Headstock Chucks are designed to thread directly onto lathe spindles. Their capacity range, extreme accuracy, and ease of operation allow them to replace costly collet equipment. Their hollow construction makes possible the chucking of long pieces extending into the lathe spindle.

The Jacobs Center Rest Chuck, model 100CR, when mounted by means of a tapered arbor in the tailstock of a lathe, replaces a center. It provides an accurate support for turning round work when a center cannot be used. The stationary bronze jaws provide an excellent bearing surface. The jaws can be adjusted to the diameter of the work to be supported and then locked.

**HEADSTOCK  
CHUCKS**

**ARMATURE  
DRIVING CHUCK**

**CENTER REST CHUCK**

**VALVE REFACER  
CHUCK**

CHUCK MODEL	CAP.	TAPERED or THREADED MOUNT	USES KEY	WEIGHT lbs. ozs.	LENGTH Closed Open	DIAM.
55B 1-8	*0-1 1/32"	1-8	K3	2-4	4 3 1/16	2 5/16
56B 1-10	*0-1 1/32"	1-10	K3	2-5	4 3 1/16	2 5/16
58B 1 1/2-8	1/8-5/8	1 1/2-8	K3	2-7	4 2 1/32 3 3/4	2 5/16
59B 1 1/2-8	3/16-3/4	1 1/2-8	K4	3-10	5 1/32 4 1/8	2 5/16
75A	1/4-3/4	3 JT	K3	1-15	3 3/8 2 7/8	2 5/16
100CR	1/4-3/4	3 JT	Keyless	2-3	3 7/8 2 7/8	2 5/16
34VR	3/16-9/16	special	K3	1-10	3 1/32 2 1 1/16	2 1/16

\*Models 55B and 56B can be provided with optional capacity of 1/8-3/8".



## headstock and center rest chuck parts

CHUCK MODEL	KEY	JAWS & NUT UNIT	SLEEVE
55B 1-8	K3	U3R	S3
56B 1-10	K3	U3R	S3
58B 1 1/2-8	K3	U3	S3
59B 1 1/2-8	K4	U36	S36
75A	K3	U75	S3
100CR	Keyless	U100	S100
34VR	K3	U34VR	S34

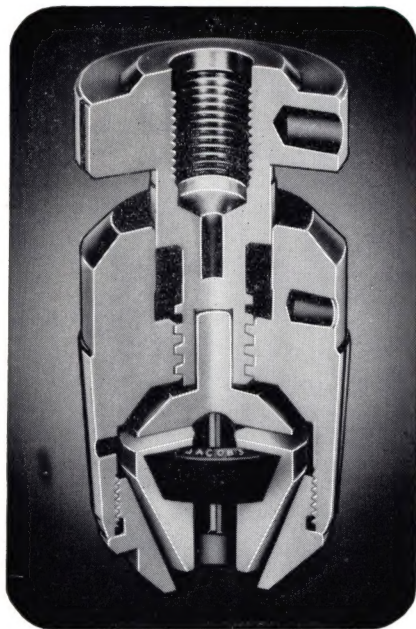
### Jacobs Commutator Kit

A complete unit designed specifically for holding armature shafts rigidly and accurately during reconditioning. This kit contains a No. 75A Armature Driving Chuck and a No. 100 Center Rest Chuck, both mounted on No. 2 Morse Taper Arbors which replace lathe centers. The Jacobs Commutator Kit will pay for itself on the first few armatures serviced.  
(No. 1 Morse Taper Arbors optional.)



# JACOBS

## hi-torque keyless chuck with rubber-flex<sup>®</sup> collet



The Jacobs Hi-Torque Keyless Chuck provides a keyless industrial drill chuck with the famous Jacobs Rubber-Flex Collet. Here is a heavy duty keyless chuck with gripping power and ease of operation which are unsurpassed. The self-tightening action of the Jacobs Rubber-Flex Collet provides the key to a reliable keyless chuck. Its simplicity

of design allows any necessary repairs to be performed in your own shop. Collets and other parts can be purchased through your industrial supply distributor.

When ordering the Hi-Torque Keyless Chuck, the PART NUMBER must be shown to identify the correct mount

### hi-torque keyless chuck models

CHUCK MODEL	PART NO.	CAPACITY	MOUNT		WEIGHT lbs. ozs.	LENGTH	DIAMETER
			TAPER	THREAD			
650	650-61	0-1/4"		3/8-24	0-12	2 13/16	1 9/16
650	650-64	0-1/4"		1/2-20	0-12	2 13/16	1 9/16
650	650-01	0-1/4"	1 JT		0-12	2 11/16	1 9/16
650	650-S2	0-1/4"	2 short JT		0-13	3 1/4	1 9/16
*650	650-D1	0-1/4"	#1 dental taper		0-12	2 21/32	1 9/16
660	660-61	0-5/16"		3/8-24	1-2	3 5/32	1 5/8
660	660-64	0-5/16"		1/2-20	1-1	3 5/32	1 5/8
660	660-S2	0-5/16"	2 short JT		1-1	3 5/32	1 5/8
670	670-02	1/32-3/8"	2 Jt		2-6	3 27/32	2 1/16
670	670-64	1/32-3/8"		1/2-20	2-6	3 15/16	2 1/16
670	670-68	1/32-3/8"		5/8-16	2-6	3 15/16	2 1/16
680	680-06	1/16-1/2"	6 JT		2-6	3 27/32	2 1/16
680	680-64	1/16-1/2"		1/2-20	2-6	3 15/16	2 1/16
680	680-68	1/16-1/2"		5/8-16	2-6	3 15/16	2 1/16

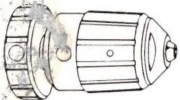
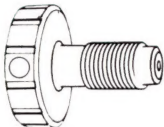


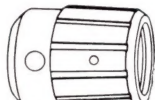

\*Model 650-D1 is designed for dental laboratories and it is equipped with a standard dental taper back mount, which has a Maximum Diameter of .3686" and a Taper of 1/4" per Foot.



# JACOBS

## hi-torque keyless chuck with rubber-flex<sup>®</sup> collet

### hi-torque keyless chuck parts

 CHUCK MODEL	 ADAPTER	 COLLET	 THRUST PLUG	 BODY	 NOSE
650	AD650-61	J650	T650	B650	N610
650	AD650-64	J650	T650	B650	N610
650	AD650-01	J650	T650	B650	N610
650	AD650-S2	J650	T650	B650	N610
650	AD650-D1	J650	T650	B650	N610
660	AD660-61	J660	T660	B660	N660
660	AD660-64	J660	T660	B660	N660
660	AD660-S2	J660	T660	B660	N660
670	AD670-02	J670	T670	B670	N670
670	AD670-64	J670	T670	B670	N670
670	AD670-68	J670	T670	B670	N670
680	AD680-06	J680	T670	B680	N670
680	AD670-64	J680	T670	B680	N670
680	AD670-68	J680	T670	B680	N670

### INTERCHANGEABILITY BETWEEN PORTOMATIC KEYLESS AND HI-TORQUE KEYLESS CHUCKS.

PORTOMATIC CHUCK MODEL	HI-TORQUE EQUIVALENT
250B 3/8-24	650-61
250B 1/2-20	650-64
250-1A	650-01
250	650-S2
312B 3/8-24	660-61
312B 1/2-20	660-64
312	660-S2

PORTOMATIC CHUCK MODEL	HI-TORQUE EQUIVALENT
375	670-02
375B 1/2-20	670-64
375B 5/8-16	670-68
500	680-06
—	680-64
500B 5/8-16	680-68

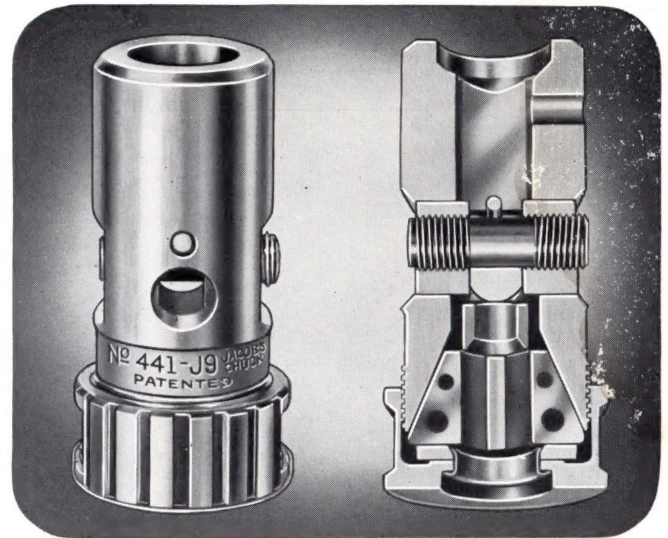
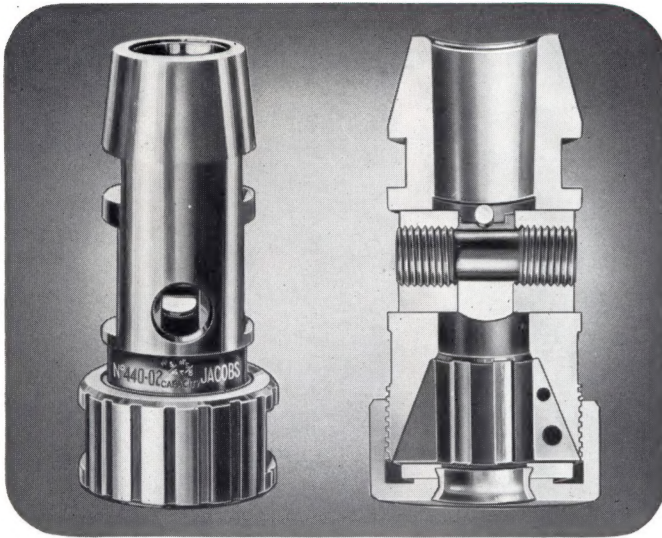


\*Reg. U.S. Pat. Off.\*



# JACOBS

## tap chucks with rubber-flex<sup>®</sup> collets



Jacobs Tap Chucks with Rubber-Flex Collets are a new type of tap holder in which you will find these essential features:

*Light Weight* — Provided by small diameter.

*Positive Drive* — Provided by floating back jaws which locate firmly on all sizes of tap squares.

*Accuracy and Gripping Power* — Provided by the Rubber-

Flex Collet preventing disengagement of the positive drive and unusual control of runout.

*Simplified Tap Changing* — Quarter turn of nut and back jaw screw disengages tap.

*Wide Collet Range* — One collet handles all tap sizes in the chuck's nominal capacity.



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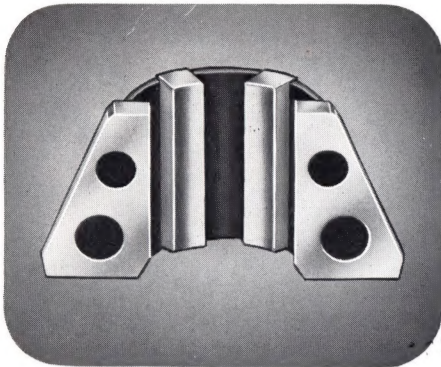
CHUCK MODEL	TAP CAPACITY	COLLET NO.	MOUNT	WEIGHT lbs. ozs.	OVERALL LENGTH		LARGEST DIAM.	NUT WRENCH FLAT	BODY WRENCH FLAT	HEX KEY SIZE	ROUND SHANK CAPACITY		SQUARE OR FLAT CAPACITY	
					MAX. CAP.	MIN. CAP.					MIN.	MAX.	MIN.	MAX.
400-01	#0-#10	J-400	1 JT	0 - 2	1 $\frac{1}{8}$	1 $\frac{3}{16}$	2 $\frac{1}{32}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{32}$	.141	.194	.090	.152
420-01	#10-5 $\frac{1}{16}$	J-420	1 JT	0 - 5	2 $\frac{3}{8}$	2 $\frac{1}{4}$	1 $\frac{1}{32}$	3 $\frac{1}{32}$	1 $\frac{1}{16}$	$\frac{1}{8}$	.194	.318	.090	.238
420-02	#10-5 $\frac{1}{16}$	J-420	2 short JT	0 - 5	2 $\frac{3}{8}$	2 $\frac{1}{4}$	1 $\frac{1}{32}$	3 $\frac{1}{32}$	1 $\frac{1}{16}$	$\frac{1}{8}$	.194	.318	.090	.238
421-01	#0-1 $\frac{1}{4}$	J-421	1 JT	0 - 5	2 $\frac{3}{8}$	2 $\frac{1}{4}$	1 $\frac{1}{32}$	3 $\frac{1}{32}$	1 $\frac{1}{16}$	$\frac{1}{8}$	.141	.255	.090	.238
421-02	#0-1 $\frac{1}{4}$	J-421	2 short JT	0 - 5	2 $\frac{3}{8}$	2 $\frac{1}{4}$	1 $\frac{1}{32}$	3 $\frac{1}{32}$	1 $\frac{1}{16}$	$\frac{1}{8}$	.141	.255	.090	.238
421-J8	#0-1 $\frac{1}{4}$	J-421	3 $\frac{1}{8}$ " Sq. Hole	0 - 5	2 $\frac{1}{16}$	2 $\frac{1}{8}$	1 $\frac{1}{32}$	3 $\frac{1}{32}$	none	$\frac{1}{8}$	.141	.255	.090	.191
440-02	5 $\frac{1}{16}$ -5 $\frac{1}{8}$	J-440	2 JT	0 - 12	3	2 $\frac{7}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{16}$	3 $\frac{1}{32}$	$\frac{5}{32}$	.318	.480	.118	.360
440-06	5 $\frac{1}{16}$ -5 $\frac{1}{8}$	J-440	6 JT	0 - 11	3	2 $\frac{7}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{16}$	3 $\frac{1}{32}$	$\frac{5}{32}$	.318	.480	.118	.360
440-J10	5 $\frac{1}{16}$ -5 $\frac{1}{8}$	J-440	5 $\frac{1}{8}$ " Sq. Hole	0 - 11	3	2 $\frac{7}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{16}$	none	$\frac{5}{32}$	.318	.480	.118	.360
441-02	#10-1 $\frac{1}{2}$	J-441	2 JT	0 - 12	3	2 $\frac{7}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{16}$	3 $\frac{1}{32}$	$\frac{5}{32}$	.194	.381	.118	.360
441-06	#10-1 $\frac{1}{2}$	J-441	6 JT	0 - 11	3	2 $\frac{7}{8}$	1 $\frac{1}{2}$	1 $\frac{1}{16}$	3 $\frac{1}{32}$	$\frac{5}{32}$	.194	.381	.118	.360
441-J9	#10-1 $\frac{1}{2}$	J-441	1 $\frac{1}{2}$ " Sq. Hole	0 - 12	3	2 $\frac{1}{16}$	1 $\frac{1}{2}$	1 $\frac{1}{16}$	none	$\frac{5}{32}$	.194	.381	.118	.360

The J-420 Collet is interchangeable with the J-421. Thus, a J-421 Collet mounted in a 420-01 Chuck changes its range to hold #0-1 $\frac{1}{4}$ " Taps.

The same interchangeability is possible between the J-440 Collet and the J-441

The price of the chuck includes the body wrench, the nut wrench and the hex key





The Jacobs Rubber-Flex Collet, "the collet with a range," is entirely different in design and operation from any collet now in use. Its features include the following distinct advantages:

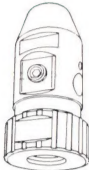







1. Ability of each collet to handle a wide range of shank sizes.
2. Extreme simplicity of design — one piece construction — with all working surfaces precision ground after molding.
3. Tremendous gripping power provided by a high degree of parallelism maintained on all jaw surfaces.
4. All jaws made from hardened nickel molybdenum alloy steel to provide greater resistance to wear.

The body of the collet is made of a synthetic rubber compound which is permanently bonded to and passes through holes in the hardened steel jaws. Past performance has proved that this type of collet has tremendous life brought about by its resistance to set, and to deterioration normally caused by heat, coolants and cutting compounds. The hardened and ground collet jaw segments located in a ground conical bore in the chuck body assure an unusually concentric relationship between the tap and the chuck. Tap runout is reduced to a minimum.

Complete repair parts for the Jacobs Rubber-Flex Tap Chuck are available through your distributor.



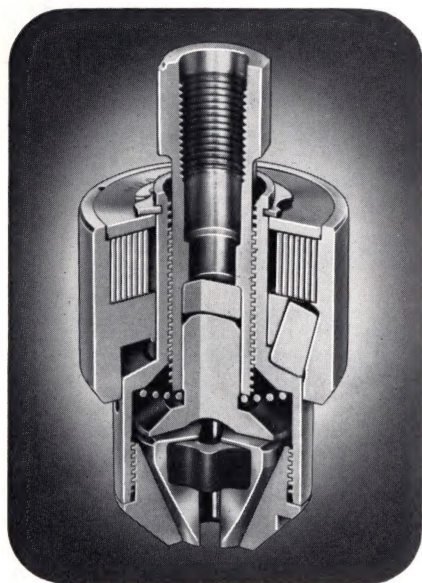
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CHUCK MODEL	BODY	NUT	COLLET	BACK JAWS	NUT WRENCH	BODY WRENCH	HEX KEY
400-01	B40001	N400	J400	U400	K400N	K400B	K59
420-01	B42001	N421	J420	U420	K420N	K420B	K60
420-02	B42002	N421	J420	U420	K420N	K420B	K60
421-01	B42101	N421	J421	U420	K420N	K420B	K60
421-02	B42102	N421	J421	U420	K420N	K420B	K60
421-J8	B421J8	N421	J421	U420	K420N	none	K60
440-02	B44002	N440	J440	U440	K440N	K420N	K61
440-06	B44006	N440	J440	U440	K440N	K420N	K61
440-J10	B440J10	N440	J440	U440	K440N	none	K61
441-02	B44102	N440	J441	U440	K440N	K420N	K61
441-06	B44106	N440	J441	U440	K440N	K420N	K61
441-J9	B441J9	N440	J441	U440	K440N	none	K61



# JACOBS

## impact keyless chuck with rubber-flex<sup>®</sup> collet



The Jacobs Impact Keyless Chuck is a new type of keyless chuck operating on an entirely new principle which employs the use of a "Hammer Blow" to grip or release the twist drill. Both large and small drills are held true and tight by the tremendous gripping power of the famous Jacobs Rubber-Flex Collet, yet the impact device provides a rapid and simple release of the twist drill. The principal application for this chuck will be on work where frequent tool changes are necessary, or where drilling torques are high.

The complete chuck consists of two components, the chuck proper and its mounting adapter. The adapter is provided with a  $\frac{3}{8}$ "-24 internal mounting thread and can be mounted on  $\frac{1}{4}$ " electric and pneumatic drills with a standard  $\frac{3}{8}$ "-24 spindle.

Complete repair parts for the Jacobs Impact Keyless Chuck are available through your distributor. These chucks may also be returned to the factory for reconditioning. See page 14.



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CHUCK MODEL	CAPACITY	MOUNT	WEIGHT lbs. ozs.	LENGTH	DIAMETER
610-61	0- $\frac{1}{4}$ "	$\frac{3}{8}$ -24 thd.	0 - 10	2 $\frac{7}{8}$	1 $\frac{1}{2}$

### impact keyless chuck parts

CHUCK MODEL	ADAPTER	SNAP RING	COVER PLATE	CLOCK SPRING	IMPACT SLEEVE	BODY	COIL SPRING THRUST PLUG	COLLET	NOSE
610-61	AD610-61	RR610	CP610	CS610	S610	B610	Spring TS610 Plug T610	J610	N610





**THE JACOBS SPINDLE NOSE LATHE COLLET CHUCK**

A lathe collet chuck combining the Jacobs Rubber-Flex® Collet, "the collet with a range", and a new principle of impact tightening to give unequalled gripping power, reduced overhang, ultra accuracy, economy, capacity and durability. Only eleven rubber-flex collets required to cover a range from  $\frac{1}{16}$ " to  $1\frac{3}{8}$ ". Ask your distributor for catalog LC.



**THE JACOBS MODEL 96 KEY TYPE COLLET CHUCK**

This new addition to the Jacobs line provides another versatile shop tool using Jacobs Rubber-Flex® Collets. Combined with a taper shank arbor or adapter, the Model 96 Chuck can be used on lathe headstocks, jig borers, indexing heads, milling machines, grinders and many others for holding work as well as tool shanks up to  $1\frac{3}{8}$ " in diameter. See catalog CC.



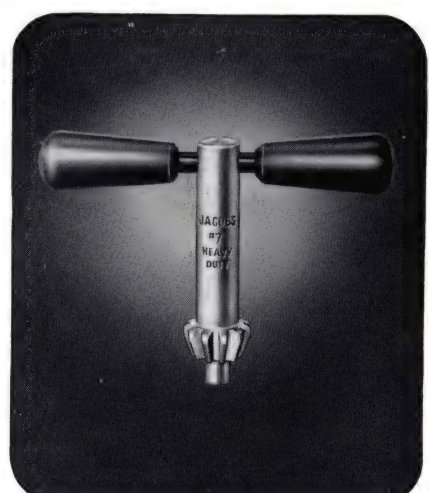
**JACOBS SINGLE PURPOSE CHUCKS**

Extensively used for high production work where tool sizes are rarely changed — drives all straight shank drills, taps, reamers, combination drills and countersinks, end mills, woodruff key cutters, etc. See catalog S.



**JACOBS STAINLESS STEEL CHUCKS**

Manufactured in capacities up to  $\frac{1}{4}$ ", these chucks provide an excellent holding means on surgical drills or like applications where stainless qualities combined with plain bearing key type operation are essential.



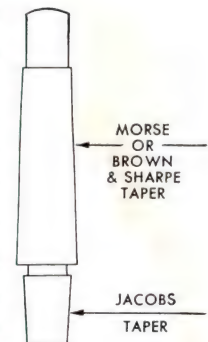
**THE HEAVY DUTY KEY**

Designed for the aircraft industry where frequent tool changes are necessary, the extra long shank and rubber thumb grips permit easy operation. Available at present, in model K7HD for chuck models 7 and 7B.



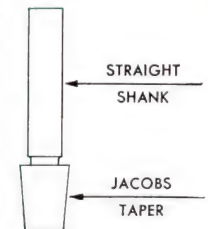
### TAPER SHANK ARBORS

SHANK TAPER	JACOBS TAPERS								
	0	1	2*	3	4	5	6	E	33
#0 Morse	stock	**	**	stock	**	**	**	**	stock
#1 Morse	stock	stock	stock	stock	stock	**	stock	**	stock
#2 Morse	stock	stock	stock	stock	stock	stock	stock	stock	stock
#3 Morse	**	stock	stock	stock	stock	stock	stock	**	stock
#4 Morse	**	stock	stock	stock	stock	stock	stock	**	stock
#5 Morse	**	**	stock	stock	stock	stock	stock	**	**
#7 Brown & Sharpe	**	**	stock	stock	**	**	stock	**	**
#9 Brown & Sharpe	**	**	**	stock	stock	**	stock	**	**
#10 Brown & Sharpe	**	**	**	stock	stock	**	**	**	**



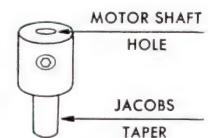
### STRAIGHT SHANK ARBORS

SHANK DIA. & LENGTH	JACOBS TAPERS								
	0	1	2*	3	4	5	6	E	33
1/2" x 2 1/2"	stock	stock	stock	stock	stock	**	stock	**	stock
5/8" x 2 1/2"	**	stock	stock	stock	stock	**	stock	**	stock
3/4" x 3"	**	**	stock	stock	stock	**	stock	**	stock
1" x 3"	**	**	stock	stock	stock	**	stock	**	stock
1 1/2" x 4"	**	**	**	stock	stock	**	**	**	**
1 3/4" x 4"	**	**	**	stock	stock	**	**	**	**



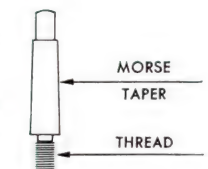
### MOTOR SHAFT ADAPTERS

MOTOR SHAFT SIZE	JACOBS TAPERS								
	0	1	2*	3	4	5	6	E	33
1/2" diameter	**	**	stock	stock	**	**	stock	**	stock



### THREADED ARBORS

SHANK TAPER	THREAD
#2 Morse	3/8-24
#2 Morse	1/2-20
#2 Morse	5/8-16



Always specify Jacobs arbors to secure the finest performance from Jacobs Drill and Tap Chucks. They are precision ground to our master gages and guarantee the finest possible accuracy and fit. Jacobs arbors feature a hardened tang which prevents damage by the drift in the knock-out process.

\*Arbors with the No. 2 Jacobs Taper will be supplied for use with chucks having a #2 short Jacobs Taper Mounting hole.

\*\*The above listing represents our standard arbors that are carried in stock. All arbors and motor shaft adapters not appearing as "stock" on the above list are special. Prices and delivery will be quoted upon application.

	NO.	A	B	C	D	E
MORSE TAPER	0	.3561	.252	2	1/8	2 1/32
	1	.475	.369	2 1/8	1/8	2 9/16
	2	.700	.572	2 3/16	3/16	3 1/8
	3	.938	.778	3 3/16	3/16	3 7/8
	4	1.231	1.020	4 1/16	1/4	4 7/8
	5	1.748	1.475	5 3/16	1/4	6 1/8
BROWN & SHARPE TAPER	7	.725	.600	3	3/32	3 3/8
	9	1.067	.900	4	1/8	4 3/4
	10	1.289	1.0446	5 11/16	1/8	6 1 1/2



### Jacobs Taper Dimensions and Arbor Interchangeability

JACOBS TAPER	LARGE DIAMETER	SMALL DIAMETER	LENGTH OF TAPER	TAPER PER FOOT	USED IN CHUCK MODELS
0	.25000	.22844	.43750	.59145	0
1	.38400	.33341	.65625	.92508	1A, 7-1A, 30-1A, 250-1A, 400-01, 420-01, 421-01, 650-01
2	.55900	.48764	.87500	.97861	2A, 6A-2A, 11N, 32, 375, 440-02, 441-02
2 short	.54880	.48764	.75000	.97861	7, 8½ N, 30, 250, 312, 420-02, 421-02, 650-S2, 660-S2
3	.81100	.74610	1.21875	.63898	3, 3A, 14N, 16N, 36, 75A, 100CR
4	1.12400	1.03720	1.65625	.62886	18N
5	1.41300	1.31611	1.87500	.62010	20N
6	.67600	.62409	1.00000	.62292	34, 500, 440-06, 441-06
33	.62401	.56051	1.00000	.76194	6A-33, 633C, 633D, 33, 3333C
E	.78860	.74717	.79680	.62400	3AE, 6AE, 36E

#### ORDERING ARBORS

In ordering arbors either of the following methods is correct.

- a** Show the style and size of the mounting shank and the model number of the Jacobs Chuck to which the arbor will be fitted.

Examples —

#2 Morse Taper Shank Arbor for #34 Jacobs Chuck.

#9 Brown & Sharpe Taper Shank Arbor for #18N Jacobs Ball Bearing Super Chuck.

¾" Diameter Straight Shank Arbor for #3 Jacobs Chuck.

- b** Show the style and size of the mounting shank and then the actual Jacobs Taper desired.

Examples —

#2 Morse Taper Shank Arbor with #6 JT

#9 Brown & Sharpe Taper Shank Arbor with #4 JT

¾" Diameter Straight Shank Arbor with #3 JT

#### SUGGESTED METHOD FOR MOUNTING DRILL CHUCKS

**On threaded spindle portable tools** — thread chuck on the spindle by hand so that the back of the chuck seats firmly against the mounting surface provided on the portable tool spindle.

**On tapered spindle portable tools** — clean both tapers with carbon tetrachloride and wipe with a paper towel to free the tapers of all grease and grit. With the chuck jaws completely retracted into the chuck and using a thin piece of wood to protect the chuck nose, tap the chuck into place on the spindle.

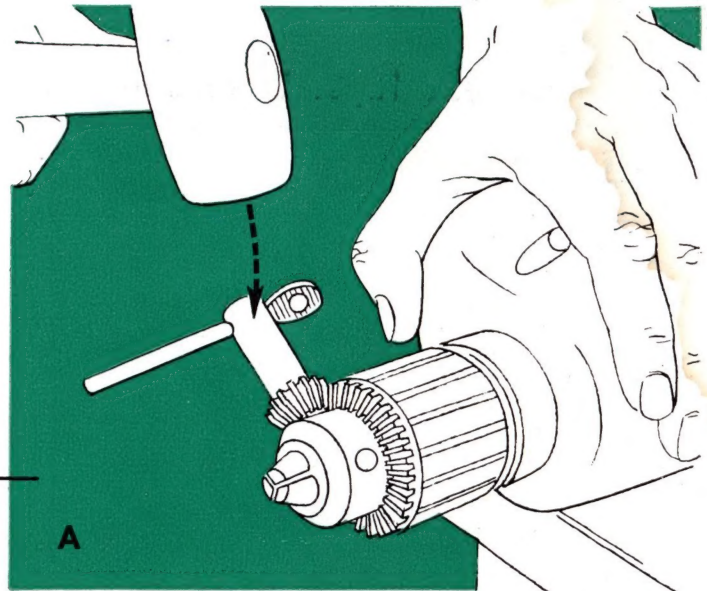
**On tapered spindle drill presses** — follow the same directions as suggested on tapered spindle portable tools.

**On tapered shank arbors** — clean both tapers as above. With the jaws retracted into the chuck and with the chuck nose resting on a wooden bench, strike the tang of the arbor lightly to seat it into the chuck. Do NOT assemble on an arbor press as excessive pressure will expand the chuck body and distort the chuck jaw holes.



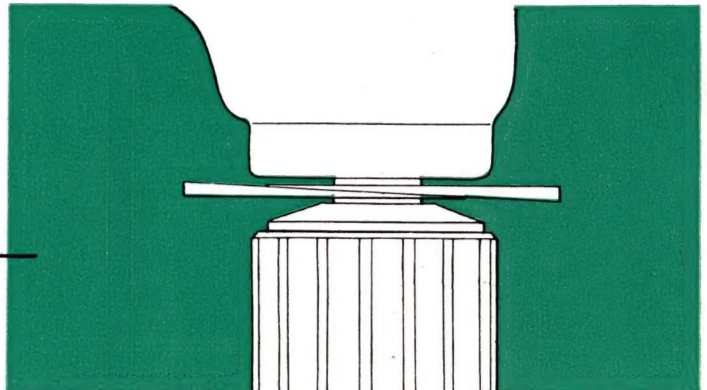
### To remove chucks from portable tool **THREADED SPINDLES** . . .

Chucks with threaded backs can be identified by the letter "B" in the model number. (1B, 32B, etc.) "B" model chucks may be removed from a threaded spindle by inserting a chuck key in a keyhole in the chuck body and striking the key with a sharp hammer blow in a counterclockwise direction. (see A)



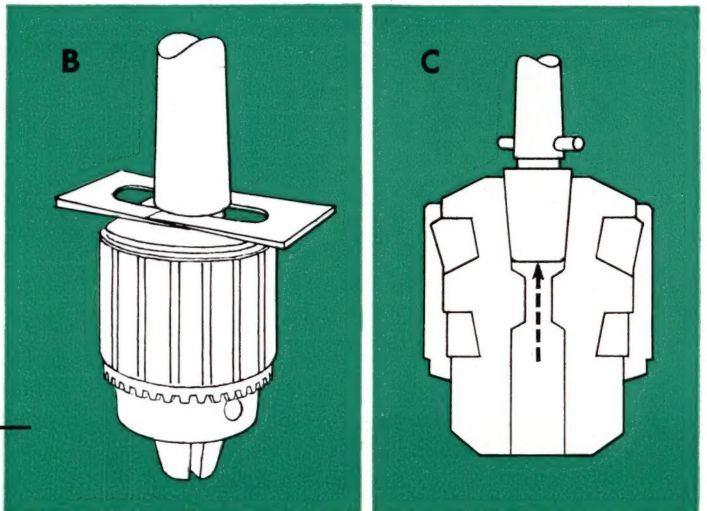
### To remove chucks from portable tool **TAPERED SPINDLES** . . .

If the portable tool has a tapered spindle, the chuck may be removed from the spindle by inserting chuck removal wedges between the chuck back and the spindle housing.



### To remove a chuck from its arbor . . .

Insert wedges between the back of the chuck and the shoulder of the arbor. (see B) In case the mounting taper of the arbor does not provide a shoulder, a cross hole should be drilled through the neck of the arbor, (see C) and a cross pin inserted. Then the wedges can be used between the chuck back and the cross pin. If desired a hole may be drilled through the soft center portion of the chuck body, (see C) and a pin may then be used with an arbor press to force the arbor out of the chuck.





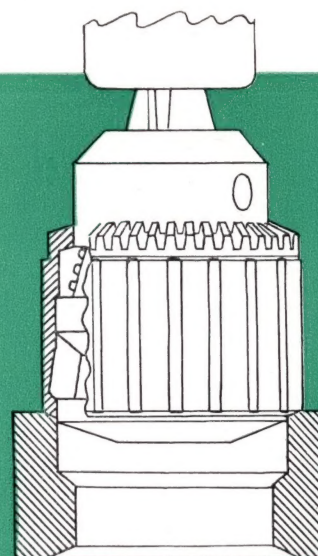
### To disassemble super chucks

Extend the jaws to half capacity, press the sleeve off over the jaw end of the body, remove the balls from race through feeding notch in the nut, leaving the nut and jaws free to be removed. The ball race insert can then be lifted off over the jaw end of the body. (see D)

### To disassemble plain bearing chucks

Extend the jaws to half capacity, press the sleeve off over the jaw end of the body and take out the nut and jaws. (see D)

D



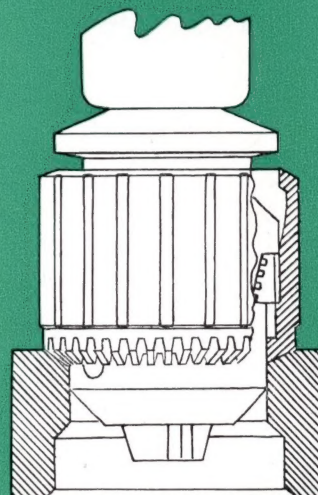
### To assemble super chucks

Slip the ball race over the jaw end of the body, insert the three jaws in the body according to the corresponding numbers on them, advance the jaws to half capacity, apply a good grade of grease to the thread on the nut and place it in position to engage the jaws; then feed balls into ball race through loading notch in the nut, apply good grease to balls and press on the sleeve with an arbor press. (see E)

### To assemble plain bearing chucks

Insert the three jaws in the body according to corresponding numbers on them, advance the jaws to half capacity, apply a good grade of grease to the thread on the nut, place it in position to engage the jaws, pressing on the sleeve with an arbor press. (see E)

E



## Jacobs repair service

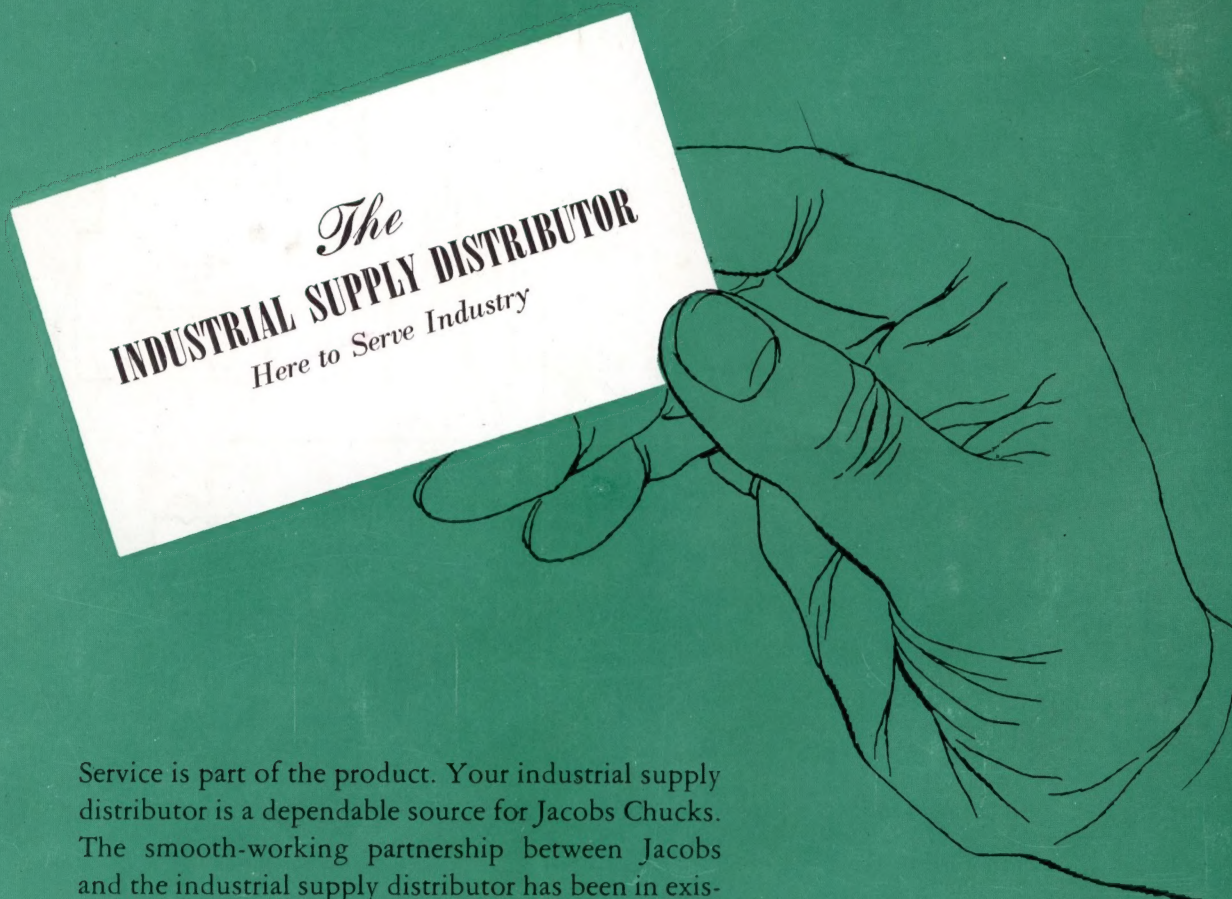
JACOBS CHUCKS can be repaired either by purchasing the necessary parts from your distributor, or by having your distributor ship chucks to the factory for reprocessing. Only in this way can chucks be thoroughly overhauled. Bodies will be reground, jaw holes will be refinished, and new parts including the key will be pro-

vided. In addition, jaws will be internally ground after assembly in the chuck to insure accuracy. It should be noted, however, that chucks cannot be repaired where bodies are not in good condition, i.e., if the taper hole, key holes, or jaw holes are marred, worn or battered. They should be replaced. See price list for repair charges.

Customers desiring to do their own repair work can do so with a Jacobs Chuck Repair Kit which contains assembly and disassembly rings, wedges, and jaw hole reamers. Price available upon request.



Greet the man who  
helps you meet your problems:



Service is part of the product. Your industrial supply distributor is a dependable source for Jacobs Chucks. The smooth-working partnership between Jacobs and the industrial supply distributor has been in existence for over fifty years and has been largely responsible for the consumer acceptance of Jacobs Chucks.

The Jacobs Manufacturing Company  
West Hartford 10, Connecticut.

One of the World's Finest Partnerships

**JACOBS**

**and your industrial supply distributor**  
*first in chucks . . . first in service*